```
Welcome to STN International
 NEWS
                  Web Page URLs for STN Seminar Schedule - N. America
 NEWS
                  "Ask CAS" for self-help around the clock
 NEWS
         OCT 23
                  The Derwent World Patents Index suite of databases on STN
                  has been enhanced and reloaded
         OCT 30
                  CHEMLIST enhanced with new search and display field
 NEWS
 NEWS 5
         NOV 03
                 JAPIO enhanced with IPC 8 features and functionality
                 CA/CAplus F-Term thesaurus enhanced
 NEWS 6
         NOV 10
 NEWS 7
         NOV 10
                  STN Express with Discover! free maintenance release Version
                  8.01c now available
 NEWS 8
         NOV 20
                 CA/CAplus to MARPAT accession number crossover limit increased
                  to 50,000
 NEWS 9
         DEC 01
                 CAS REGISTRY updated with new ambiguity codes
         DEC 11
                 CAS REGISTRY chemical nomenclature enhanced
 NEWS 10
 NEWS 11
         DEC 14
                  WPIDS/WPINDEX/WPIX manual codes updated
 NEWS 12
         DEC 14
                  GBFULL and FRFULL enhanced with IPC 8 features and
                  functionality
 NEWS 13
         DEC 18
                 CA/CAplus pre-1967 chemical substance index entries enhanced
                  with preparation role
 NEWS 14
         DEC 18
                 CA/CAplus patent kind codes updated
                 MARPAT to CA/CAplus accession number crossover limit increased
 NEWS 15
         DEC 18
                  to 50,000
         DEC 18
                 MEDLINE updated in preparation for 2007 reload
 NEWS 16
 NEWS 17
         DEC 27
                 CA/CAplus enhanced with more pre-1907 records
 NEWS 18
         JAN 08
                 CHEMLIST enhanced with New Zealand Inventory of Chemicals
 NEWS 19
         JAN 16
                 CA/CAplus Company Name Thesaurus enhanced and reloaded
 NEWS 20
         JAN 16
                  IPC version 2007.01 thesaurus available on STN
 NEWS 21
         JAN 16
                 WPIDS/WPINDEX/WPIX enhanced with IPC 8 reclassification data
 NEWS 22
         JAN 22
                 CA/CAplus updated with revised CAS roles
 NEWS 23
         JAN 22
                  CA/CAplus enhanced with patent applications from India
 NEWS 24
         JAN 29
                  PHAR reloaded with new search and display fields
         JAN 29
 NEWS 25
                 CAS Registry Number crossover limit increased to 300,000 in
                  multiple databases
                  CASREACT coverage to be extended
 NEWS 26 FEB 13
 NEWS 27
         Feb 15
                 PATDPASPC enhanced with Drug Approval numbers
 NEWS 28
         Feb 15
                 RUSSIAPAT enhanced with pre-1994 records
 NEWS 29
         Feb 23
                 KOREAPAT enhanced with IPC 8 features and functionality
 NEWS 30 Feb 26
                 MEDLINE reloaded with enhancements
 NEWS 31
         Feb 26
                 EMBASE enhanced with Clinical Trial Number field
 NEWS 32
         Feb 26
                 TOXCENTER enhanced with reloaded MEDLINE
 NEWS 33
         Feb 26
                 IFICDB/IFIPAT/IFIUDB reloaded with enhancements
 NEWS 34
         Feb 26
                 CAS Registry Number crossover limit increased from 10,000
                  to 300,000 in multiple databases
 NEWS EXPRESS
              NOVEMBER 10 CURRENT WINDOWS VERSION IS V8.01c, CURRENT
              MACINTOSH VERSION IS V6.0c(ENG) AND V6.0Jc(JP)
              AND CURRENT DISCOVER FILE IS DATED 25 SEPTEMBER 2006.
              STN Operating Hours Plus Help Desk Availability
 NEWS HOURS
 NEWS LOGIN
              Welcome Banner and News Items
 NEWS IPC8
              For general information regarding STN implementation of IPC 8
 NEWS X25
              X.25 communication option no longer available
Enter NEWS followed by the item number or name to see news on that
```

specific topic.

All use of STN is subject to the provisions of the STN Customer agreement. Please note that this agreement limits use to scientific research. Use for software development or design or implementation of commercial gateways or other similar uses is prohibited and may result in loss of user privileges and other penalties.

* * * * * * STN Columbus

FILE 'HOME' ENTERED AT 19:51:40 ON 12 MAR 2007

=> file reg

COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

0.21

0.21

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:51:53 ON 12 MAR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 MAR 2007 HIGHEST RN 926007-42-3 DICTIONARY FILE UPDATES: 11 MAR 2007 HIGHEST RN 926007-42-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> s beta hydroxy beta methyl butyrate

1716826 BETA

3670853 HYDROXY

1716826 BETA

17583210 METHYL

8397 BUTYRATE

L1 1 BETA HYDROXY BETA METHYL BUTYRATE
(BETA(W)HYDROXY(W)BETA(W)METHYL(W)BUTYRATE)

=> d

L1 ANSWER 1 OF 1 REGISTRY COPYRIGHT 2007 ACS on STN

RN 135236-72-5 REGISTRY

ED Entered STN: 02 Aug 1991

CN Butanoic acid, 3-hydroxy-3-methyl-, calcium salt (2:1) (9CI) (CA INDEX NAME)

OTHER NAMES:

CN Calcium β-hydroxy-β-methylbutyrate

MF C5 H10 O3 . 1/2 Ca

SR CA

LC STN Files: CA, CAPLUS, CASREACT, CHEMCATS, CSCHEM, PROUSDDR, TOXCENTER, USPATFULL

CRN (625-08-1)

●1/2 Ca

```
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
```

13 REFERENCES IN FILE CA (1907 TO DATE)

13 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s carnitine

L2 920 CARNITINE

=> s eicosapentaenoic acid

951 EICOSAPENTAENOIC

8122654 ACID

L3 932 EICOSAPENTAENOIC ACID

(EICOSAPENTAENOIC (W) ACID)

=> s docoshexaenoic acid

0 DOCOSHEXAENOIC

8122654 ACID

L4 0 DOCOSHEXAENOIC ACID

(DOCOSHEXAENOIC (W) ACID)

=> s docosahexaenoic acid

963 DOCOSAHEXAENOIC

8122654 ACID

L5 958 DOCOSAHEXAENOIC ACID

(DOCOSAHEXAENOIC(W)ACID)

=> s fructooligosaccharide

L6 0 FRUCTOOLIGOSACCHARIDE

=> s 12

L7 920 CARNITINE

=>d

L7 ANSWER 1 OF 920 REGISTRY COPYRIGHT 2007 ACS on STN

RN 922788-39-4 REGISTRY

ED Entered STN: 22 Feb 2007

CN Transporter of the Betaine / Carnitine / Choline Transporter family (Gramella forsetii strain KT0803) (CA INDEX NAME)

OTHER NAMES:

CN GenBank CAL67508

CN GenBank CAL67508 (Translated from: GenBank CU207366)

FS PROTEIN SEQUENCE

MF Unspecified

CI MAN

SR GenBank

LC STN Files: CA, CAPLUS

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

*** USE 'SQD' OR 'SQIDE' FORMATS TO DISPLAY SEQUENCE ***

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
=> s 13
                                           951 EICOSAPENTAENOIC
                            8122654 ACID
L8
                                           932 EICOSAPENTAENOIC ACID
                                                                    (EICOSAPENTAENOIC (W) ACID)
=> d
                  ANSWER 1 OF 932 REGISTRY COPYRIGHT 2007 ACS on STN
L8
                   916218-11-6 REGISTRY
RN
ED
                   Entered STN: 22 Dec 2006
                   2,4,6,10,12-Eicosapentaenoic acid, 19,20-bis(acetyloxy)-9-[[(1,1-
CN
                   dimethylethyl) dimethylsilyl] oxy] - 20 - [(2R, 3R, 4S, 5S, 6R) - 4 - [[(1, 1-4)]] oxy] - 20 - [(2R, 3R, 4S, 5S, 6R) - 4 - [[(1, 1-4)]] oxy] - 20 - [(2R, 3R, 4S, 5S, 6R) - 4 - [[(1, 1-4)]] oxy] - 20 - [(2R, 3R, 4S, 5S, 6R) - 4 - [[(1, 1-4)]] oxy] - 20 - [(1, 1-4)] oxy] - 2
                   dimethylethyl)dimethylsilyl]oxy]-6-[(2R)-2-[[(1,1-
                   dimethylethyl)dimethylsilyl]oxy]-3-methoxypropyl]tetrahydro-2-methoxy-3,5-
                   dimethyl-2H-pyran-2-yl]-16-hydroxy-17-methoxy-2,4,6,8,12-pentamethyl-,
                   ethyl ester, (2E,4E,6E,8R,9R,10E,12E,16S,17S,19S,20R) - (CA INDEX
                   NAME)
                   STEREOSEARCH
FS
                   C62 H114 O14 Si3
MF
SR
                   CA
LC
                   STN Files:
                                                                     CA, CAPLUS, CASREACT
```

Absolute stereochemistry. Rotation (+). Double bond geometry as shown.

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1 REFERENCES IN FILE CA (1907 TO DATE)

1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 14

0 DOCOSHEXAENOIC

8122654 ACID

L9 0 DOCOSHEXAENOIC ACID

(DOCOSHEXAENOIC (W) ACID)

=> s 15

963 DOCOSAHEXAENOIC

8122654 ACID

L10 958 DOCOSAHEXAENOIC ACID

(DOCOSAHEXAENOIC (W) ACID)

=> d

L10 ANSWER 1 OF 958 REGISTRY COPYRIGHT 2007 ACS on STN

RN 919439-51-3 REGISTRY

ED Entered STN: 06 Feb 2007

CN 4,7,10,13,16,19-Docosahexaenoic acid, (4Z,7Z,10Z,13Z,16Z,19Z)-, mixt. with (5Z,8Z,11Z,14Z,17Z)-5,8,11,14,17-docosapentaenoic acid and (5Z,8Z,11Z,14Z)-5,8,11,14-eicosatetraenoic acid (CA INDEX NAME)

FS STEREOSEARCH

MF C22 H34 O2 . C22 H32 O2 . C20 H32 O2

CI MXS

SR CA

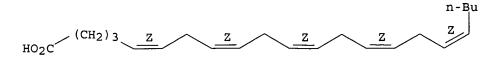
LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL

CM 1

CRN 24257-13-4

CMF C22 H34 O2

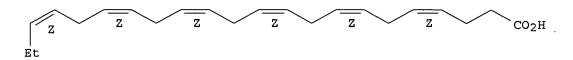
Double bond geometry as shown.



CM 2

CRN 6217-54-5 CMF C22 H32 O2

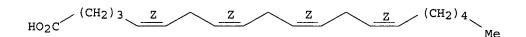
Double bond geometry as shown.



CM 3

CRN 506-32-1 CMF C20 H32 O2

Double bond geometry as shown.



1 REFERENCES IN FILE CA (1907 TO DATE)
1 REFERENCES IN FILE CAPLUS (1907 TO DATE)

=> s 16

0 FRUCTOOLIGOSACCHARIDE

=> file caplus
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION

FULL ESTIMATED COST

114.00 114.21

FILE 'CAPLUS' ENTERED AT 19:55:03 ON 12 MAR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS. COPYRIGHT (C) 2007 AMERICAN CHEMICAL SOCIETY (ACS)

Copyright of the articles to which records in this database refer is held by the publishers listed in the PUBLISHER (PB) field (available for records published or updated in Chemical Abstracts after December 26, 1996), unless otherwise indicated in the original publications. The CA Lexicon is the copyrighted intellectual property of the American Chemical Society and is provided to assist you in searching databases on STN. Any dissemination, distribution, copying, or storing of this information, without the prior written consent of CAS, is strictly prohibited.

FILE COVERS 1907 - 12 Mar 2007 VOL 146 ISS 12 FILE LAST UPDATED: 11 Mar 2007 (20070311/ED)

Effective October 17, 2005, revised CAS Information Use Policies apply. They are available for your review at:

http://www.cas.org/infopolicy.html

=> s us20050215640/pn

L12 1 US20050215640/PN

=> sel rn
E1 THROUGH E14 ASSIGNED

=> file reg
COST IN U.S. DOLLARS

SINCE FILE TOTAL ENTRY SESSION 2.56 116.77

FULL ESTIMATED COST

FILE 'REGISTRY' ENTERED AT 19:55:32 ON 12 MAR 2007 USE IS SUBJECT TO THE TERMS OF YOUR STN CUSTOMER AGREEMENT. PLEASE SEE "HELP USAGETERMS" FOR DETAILS.
COPYRIGHT (C) 2007 American Chemical Society (ACS)

Property values tagged with IC are from the ZIC/VINITI data file provided by InfoChem.

STRUCTURE FILE UPDATES: 11 MAR 2007 HIGHEST RN 926007-42-3 DICTIONARY FILE UPDATES: 11 MAR 2007 HIGHEST RN 926007-42-3

New CAS Information Use Policies, enter HELP USAGETERMS for details.

TSCA INFORMATION NOW CURRENT THROUGH December 2, 2006

Please note that search-term pricing does apply when conducting SmartSELECT searches.

REGISTRY includes numerically searchable data for experimental and predicted properties as well as tags indicating availability of experimental property data in the original document. For information on property searching in REGISTRY, refer to:

http://www.cas.org/ONLINE/UG/regprops.html

=> s e1-e14

L13

1 625-08-1/BI (625-08-1/RN) 1 10417-94-4/BI (10417-94-4/RN) 1 137632-07-6/BI (137632-07-6/RN) 1 137632-08-7/BI (137632-08-7/RN) 1 140879-24-9/BI (140879-24-9/RN) 1 155206-13-6/BI (155206-13-6/RN) 1 155206-14-7/BI (155206-14-7/RN) 1 176389-82-5/BI (176389-82-5/RN) 1 1823-52-5/BI (1823-52-5/RN) 1 472998-88-2/BI (472998-88-2/RN) 1 541-15-1/BI (541-15-1/RN) 1 6217-54-5/BI (6217-54-5/RN) 1 786710-98-3/BI (786710-98-3/RN) 1 9004-10-8/BI (9004-10-8/RN)

14 (625-08-1/BI OR 10417-94-4/BI OR 137632-07-6/BI OR 137632-08-7/B

I OR 140879-24-9/BI OR 155206-13-6/BI OR 155206-14-7/BI OR 17638 9-82-5/BI OR 1823-52-5/BI OR 472998-88-2/BI OR 541-15-1/BI OR 6217-54-5/BI OR 786710-98-3/BI OR 9004-10-8/BI)

=> d 1-14

L13 ANSWER 1 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN RN786710-98-3 REGISTRY ED Entered STN: 23 Nov 2004 Butanoic acid, 3-hydroxy-3-methyl-, magnesium salt (1:1) (9CI) (CA INDEX CN NAME) C5 H10 O3 . Mg MF CA SR LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL CRN (625-08-1)

$$\begin{array}{c} \text{OH} \\ \mid \\ \text{Me-C-CH}_2\text{--CO}_2\text{H} \\ \mid \\ \text{Me} \end{array}$$

● Mq

STN Files:

2 REFERENCES IN FILE CA (1907 TO DATE) 2 REFERENCES IN FILE CAPLUS (1907 TO DATE)

L13 ANSWER 2 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN 472998-88-2 REGISTRY RNEntered STN: 11 Nov 2002 EDKinase (phosphorylating), protein, aPKC (9CI) (CA INDEX NAME) CN OTHER NAMES: Atypical protein kinase C CNProtein kinase (phosphorylating) aPKC CN Protein kinase aPKC CNProtein kinase C CNProtein kinase Cu CN Protein kinase Cλ CNProtein kinase CE CNProtein kinase Cζ CNProtein kinase Mζ CNMF Unspecified CI MAN SR CA BIOSIS, CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL

*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

1017 REFERENCES IN FILE CA (1907 TO DATE) 19 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA 1024 REFERENCES IN FILE CAPLUS (1907 TO'DATE)

L13 ANSWER 3 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN RN176389-82-5 REGISTRY Entered STN: 17 May 1996 ED Butanoic acid, 3-hydroxy-3-methyl-, calcium salt (1:1) (9CI) CN NAME) C5 H10 O3 . Ca MFSR CA

LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL CRN (625-08-1)

● Ca

- 4 REFERENCES IN FILE CA (1907 TO DATE)
- 4 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 4 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
- RN 155206-14-7 REGISTRY
- ED Entered STN: 20 May 1994
- CN Butanoic acid, 3-hydroxy-3-methyl-, monopotassium salt (9CI) (CA INDEX NAME)
- MF C5 H10 O3 . K
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER, USPATFULL
- CRN (625-08-1)

K

- 7 REFERENCES IN FILE CA (1907 TO DATE)
 7 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- L13 ANSWER 5 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
- RN 155206-13-6 REGISTRY
- ED Entered STN: 20 May 1994
- CN Butanoic acid, 3-hydroxy-3-methyl-, monosodium salt (9CI) (CA INDEX NAME)
- MF C5 H10 O3 . Na
- SR CA
- LC STN Files: CA, CAPLUS, TOXCENTER, USPAT2, USPATFULL
- CRN (625-08-1)

$$\begin{array}{c} \text{OH} \\ \mid \\ \text{Me-C-CH}_2\text{--CO}_2\text{H} \\ \mid \\ \text{Me} \end{array}$$

● Na

8 REFERENCES IN FILE CAPLUS (1907 TO DATE)

```
L13 ANSWER 6 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
RN
    140879-24-9 REGISTRY
    Entered STN: 26 Apr 1992
ED
CN
     Proteinase, multicatalytic (CA INDEX NAME)
OTHER NAMES:
CN
     20S proteasome
CN
     26 S Protease
CN
     26S proteasome
CN
     E.C. 3.4.25.1
CN
    E.C. 3.4.99.46
    Large multicatalytic protease
CN
CN
    Multicatalytic protease
CN
    Multicatalytic proteinase
CN
    Multicatalytic proteinase complex
CN
    Organelle, proteasome
CN
     Prosome
CN
     Proteasome
CN
    Tricorn protease
CN
     Tricorn proteinase
    Unspecified
MF
CI
    MAN
SR
   · CA
LC
     STN Files:
                  ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, CA, CAPLUS, CHEMCATS,
       CIN, EMBASE, PIRA, PROMT, TOXCENTER, USPAT2, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
            8211 REFERENCES IN FILE CA (1907 TO DATE)
              46 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
            8248 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L13 ANSWER 7 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
RN
    137632-08-7 REGISTRY
    Entered STN: 29 Nov 1991
ED
CN
    Kinase (phosphorylating), protein, ERK2 (CA INDEX NAME)
OTHER NAMES:
CN
     42 kDa MAP kinase
CN
    ERK 2 kinase
CN
    ERK2 MAP kinase
CN
    ERK2 mitogen-activated protein kinase
CN
    ERK2 protein kinase
    Extracellular signal-regulated kinase 2
CN
CN
    Extracellular signal-regulated kinase p42
CN
    Extracellular signal-regulated protein kinase 2
    Extracellular signal-related kinase 2
CN
CN
    Gene Erk2 protein kinase
    MAP kinase 1
CN
CN
    MAP kinase ERK2
CN
    MAP kinase p41mapk
    MAP kinase p42
CN
CN
    MAP kinase-2
CN
    MAPK2
CN
    Mitogen-activated kinase Erk-2
CN
    Mitogen-activated protein kinase 1
    Mitogen-activated protein kinase 2
CN
CN
    Mitogen-activated protein kinase ERK2
CN
    Mitogen-activated protein kinase p41mapk
CN
    Mitogen-activated protein kinase p42
CN
    Mitogen-activated protein kinase Xp42
CN
    Myelin basic protein kinase P42
```

CN

p42 ERK kinase

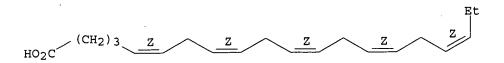
```
p42 ERK-2 kinase
CN
CN
     P42 MAP kinase
CN
     p42 MAPK
     P42 mitogen-activated protein kinase
CN
CN
     p42mapk Kinase
     P42mapk proline-directed protein kinase
CN
CN
     P42mapk protein kinase
CN
     Pp42 map kinase
     Pp42 mitogen-activated protein kinase
CN
     Pp42mapk phosphoproteins
CN
     Protein kinase ERK2
CN
     Protein kinase MAPK1
CN
     Protein kinase MAPK2
CN
    Protein kinase MPK2
CN
CN
     Protein kinase p42mapk
     Protein kinase p42mapk
CN
     Protein kinase PK40erk2
CN
     Protein p42mapk kinase
CN
     144713-49-5
DR
MF
     Unspecified
CI
     MAN
SR
     CA
                  AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, CIN, EMBASE, PROMT,
LC
     STN Files:
       TOXCENTER, USPAT2, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
           16309 REFERENCES IN FILE CA (1907 TO DATE)
             672 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           16386 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L13 ANSWER 8 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
     137632-07-6 REGISTRY
RN
     Entered STN: 29 Nov 1991
ED
     Kinase (phosphorylating), protein, ERK1 (CA INDEX NAME)
CN
OTHER NAMES:
CN
     ERK1 kinase
     ERK1 map kinase
CN
CN .
     ERK1 mitogen-activated protein kinase
     ERK1 phosphoproteins
CN
CN
     ERK1 protein kinase
CN
     Extracellular signal-regulated kinase 1
     Extracellular signal-regulated kinase 1 phosphoproteins
CN
     Extracellular signal-regulated kinase p44
CN
CN
     Extracellular signal-regulated protein kinase 1
CN
     Extracellular signal-regulated protein kinase ERK1
CN
     Gene Erk-1 myelin basic protein kinase
CN
     Gene Erkl protein kinase
CN
     MAP kinase 3
CN
     MAP kinase p44ERK-1
     MAP kinase p44erk1/mapk
CN
CN
     MAPK3
CN
     Mitogen-activated kinase Erk-1
     Mitogen-activated protein kinase 3
CN
     Mitogen-activated protein kinase ERK1
CN
     Mitogen-activated protein kinase p44
CN
     Mitogen-activated protein kinase p44mapk
CN
CN
     p44 ERK kinase
CN
     P44 ERK-1 kinase
     P44 MAP kinase
CN
CN
     p44 MAPK
     P44 mitogen-activated protein kinase
CN
CN
     P44mapk Kinase
```

```
P44mpk meiosis-activated myelin basic protein kinase
CN
     Pp44 mitogen-activated protein kinase
CN
     Pp44mapk phosphoproteins
CN
     Protein kinase ERK 1
CN
     Protein kinase ERK1b
CN
     Protein kinase p44mapk
CN
     Protein kinase p44mapk
CN
     Protein p44mapk kinase
CN
     144713-48-4
DR
MF
     Unspecified
CI
     MAN
SR
                  AGRICOLA, BIOSIS, BIOTECHNO, CA, CAPLUS, EMBASE, TOXCENTER,
     STN Files:
LC
       USPAT2, USPATFULL
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
           15115 REFERENCES IN FILE CA (1907 TO DATE)
             678 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           15189 REFERENCES IN FILE CAPLUS (1907 TO DATE)
L13 ANSWER 9 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
     10417-94-4 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     5,8,11,14,17-Eicosapentaenoic acid, (5Z,8Z,11Z,14Z,17Z)- (CA INDEX NAME)
OTHER CA INDEX NAMES:
     5,8,11,14,17-Eicosapentaenoic acid (6CI)
     5,8,11,14,17-Eicosapentaenoic acid, (all-Z)- (8CI)
OTHER NAMES:
     (5Z,8Z,11Z,14Z,17Z)-Eicosapentaenoic acid
CN
     (all-cis)-5,8,11,14,17-Eicosapentaenoic acid
CN
     (all-Z)-\Delta 5, 8, 11, 14, 17-Eicosapentaenoic acid
CN
     (all-Z)-5,8,11,14,17-Eicosapentaenoic acid
CN
     Eicosapentaenoic acid
CN
CN
     EPA
CN
     Icosapent
     Icosapentaenoic acid
CN
     Incromega E 7010SR
CN
     Timnodonic acid
CN
FS
     STEREOSEARCH
DR
     25377-48-4
     C20 H30 O2
MF
CI
     COM
                  ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO,
     STN Files:
LC
       CA, CABA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM,
       DDFU, DRUGU, EMBASE, IFICDB, IFIUDB, IMSDRUGNEWS, IMSRESEARCH, MRCK*,
       PATDPASPC, PHAR, PROMT, TOXCENTER, USAN, USPAT2, USPATFULL, VETU
         (*File contains numerically searchable property data)
     Other Sources:
                      WHO
```

Double bond geometry as shown.

P44mpk MAP kinase

CN

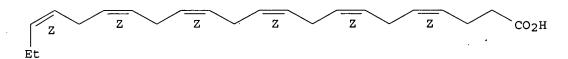


```
222 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
           10196 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               6 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
    ANSWER 10 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
L13
     9004-10-8 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     Insulin (9CI) (CA INDEX NAME)
CN
OTHER NAMES:
CN
     Actrapid
     Actrapid HM
CN
     Actrapid MC
CN
     Decurvon
CN
     Dermulin
CN
CN
     Endopancrine
     Exubera
CN
     HMR 4006
CN
     Iletin
CN
     Insular
CN
CN.
     Insulin Injection
CN
     Insulyl
CN
     Intesulin B
CN
     Iszilin
     Mixtard
CN
CN
     Musulin
     8049-67-0, 8049-95-4, 9004-12-0, 9037-76-7, 9045-63-0, 9045-65-2,
DR
     9045-66-3, 9045-67-4, 9066-39-1, 9066-40-4, 11081-38-2, 57126-42-8,
     37243-75-7, 37294-43-2, 69090-47-7, 88026-11-3, 88026-12-4
     Unspecified
ΜF
     PMS, COM, MAN
CI
     Manual registration
PCT
                  ADISNEWS, AGRICOLA, ANABSTR, BIOSIS, BIOTECHNO, CA, CABA,
     STN Files:
LC
       CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMLIST, CIN, CSCHEM, CSNB, DDFU,
       DRUGU, EMBASE, HSDB*, IFICDB, IFIPAT, IFIUDB, IMSCOSEARCH, IPA, MEDLINE,
       MRCK*, NAPRALERT, PHAR, PIRA, PROMT, RTECS*, TOXCENTER, USAN, USPAT2,
       USPATFULL, VTB
         (*File contains numerically searchable property data)
                      EINECS**, WHO
     Other Sources:
         (**Enter CHEMLIST File for up-to-date regulatory information)
*** STRUCTURE DIAGRAM IS NOT AVAILABLE ***
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
          115276 REFERENCES IN FILE CA (1907 TO DATE)
            2054 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
          115521 REFERENCES IN FILE CAPLUS (1907 TO DATE)
                                 COPYRIGHT 2007 ACS on STN
     ANSWER 11 OF 14 REGISTRY
L13
     6217-54-5 REGISTRY
RN
     Entered STN: 16 Nov 1984
ED
     4,7,10,13,16,19-Docosahexaenoic acid, (4Z,7Z,10Z,13Z,16Z,19Z)- (9CI)
CN
     INDEX NAME)
OTHER CA INDEX NAMES:
     4,7,10,13,16,19-Docosahexaenoic acid, (all-Z)- (8CI)
CN
     Docosahexaenoic acid (6CI)
CN
OTHER NAMES:
      (4Z,7Z,10Z,13Z,16Z,19Z)-4,7,10,13,16,19-Docosahexaenoic acid
CN
      (4Z,7Z,10Z,13Z,16Z,19Z)-Docosahexaenoic acid
CN
      (4Z,7Z,10Z,13Z,16Z,19Z)-Docosahexenoic acid
CN
      (all-Z)-4,7,10,13,16,19-Docosahexaenoic acid
CN
     \Delta 4, 7, 10, 13, 16, 19-Docosahexaenoic acid
CN
     4-cis,7-cis,10-cis,13-cis,16-cis,19-cis-Docosahexaenoic acid
CN
```

10159 REFERENCES IN FILE CA (1907 TO DATE)

CN all-cis-4,7,10,13,16,19-Docosahexaenoic acid CN all-Z-Docosahexaenoic acid CN Cervonic acid CNDHA CN Doconexent CN Marinol D 50TG STEREOSEARCH FS 25377-50-8 DR MF C22 H32 O2 CI COM ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, LC STN Files: BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CHEMCATS, CHEMLIST, CIN, CSCHEM, EMBASE, IMSRESEARCH, MRCK*, PATDPASPC, PROMT, SYNTHLINE, TOXCENTER, USAN, USPAT2, USPATFULL (*File contains numerically searchable property data) Other Sources: WHO

Double bond geometry as shown.



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

10819 REFERENCES IN FILE CA (1907 TO DATE)
183 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
10861 REFERENCES IN FILE CAPLUS (1907 TO DATE)
9 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

L13 ANSWER 12 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN 1823-52-5 REGISTRY RN Entered STN: 16 Nov 1984 ED 2-Oxetanone, 4,4-dimethyl- (9CI) (CA INDEX NAME) CN OTHER CA INDEX NAMES: Butyric acid, 3-hydroxy-3-methyl-, β-lactone (6CI, 7CI, 8CI) CN OTHER NAMES: β , β -Dimethyl- β -propiolactone CN β , β -Dimethyl-propiolactone CN CN 3,3-Dimethyl-3-propanolide 4,4-Dimethyl-2-oxetanone CN C5 H8 O2 MF CI COM ANABSTR, BEILSTEIN*, CA, CAOLD, CAPLUS, CASREACT, CHEMLIST, LC STN Files: SPECINFO, TOXCENTER, USPAT2, USPATFULL (*File contains numerically searchable property data)



PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

- 46 REFERENCES IN FILE CA (1907 TO DATE)
- 46 REFERENCES IN FILE CAPLUS (1907 TO DATE)
- 10 REFERENCES IN FILE CAOLD (PRIOR TO 1967)

```
L13
    ANSWER 13 OF 14 REGISTRY COPYRIGHT 2007 ACS on STN
RN
     625-08-1 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     Butanoic acid, 3-hydroxy-3-methyl- (9CI)
                                                (CA INDEX NAME)
OTHER CA INDEX NAMES:
     Butyric acid, 3-hydroxy-3-methyl- (6CI, 7CI, 8CI)
OTHER NAMES:
CN
     β-Hydroxy-β-methylbutyric acid
CN
     β-Hydroxyisovaleric acid
CN
     3-Hydroxy-3-methylbutanoic acid
CN
     3-Hydroxy-3-methylbutyric acid
CN
     3-Hydroxyisovaleric acid
MF
     C5 H10 O3
CI
     COM
LC
     STN Files:
                  AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS, BIOTECHNO, CA, CAOLD,
       CAPLUS, CASREACT, CHEMCATS, CSCHEM, EMBASE, IPA, MEDLINE, SPECINFO,
       TOXCENTER, USPAT2, USPATFULL
         (*File contains numerically searchable property data)
   OH
Me^-C^-CH_2^-CO_2H
   Me
**PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT**
             341 REFERENCES IN FILE CA (1907 TO DATE)
               9 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
             342 REFERENCES IN FILE CAPLUS (1907 TO DATE)
               7 REFERENCES IN FILE CAOLD (PRIOR TO 1967)
    ANSWER 14 OF 14 REGISTRY
                                COPYRIGHT 2007 ACS on STN
RN
     541-15-1 REGISTRY
ED
     Entered STN: 16 Nov 1984
CN
     1-Butanaminium, 2,4-dihydroxy-N,N,N-trimethyl-4-oxo-, inner salt, (2R)-
     (CA INDEX NAME)
OTHER CA INDEX NAMES:
CN
     1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, hydroxide, inner
     salt, (R)-
CN
     1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (2R)-
     (9CI)
CN
     Ammonium, (3-carboxy-2-hydroxypropyl)trimethyl-, hydroxide, inner salt, L-
     (8CI)
OTHER NAMES:
     (-)-Carnitine
CN
CN
     (-)-L-Carnitine
CN
     (R)-Carnitine
CN
     1-Propanaminium, 3-carboxy-2-hydroxy-N,N,N-trimethyl-, inner salt, (R)-
CN
     Carniking
CN
     Carniking 50
CN
     Carnilean
CN
     Carnipass
CN
     Carnipass 20
CN
     Carnitene
CN
     Carnitine
CN
     Carnitine, (-)-
CN
     Carnitor
CN
     Coaxel
CN
     L-(-)-Carnitine
CN
     1-Carnitine
```

```
L-Carnitine
CN
CN
     Levocarnitine
CN
     ST 198
CN
     Vitamin BT
     STEREOSEARCH
FS
DR
     7634-98-2, 101512-81-6, 4209-27-2
MF
     C7 H15 N O3
CI
     COM
                ADISINSIGHT, ADISNEWS, AGRICOLA, ANABSTR, BEILSTEIN*, BIOSIS,
LC
     STN Files:
       BIOTECHNO, CA, CAOLD, CAPLUS, CASREACT, CBNB, CHEMCATS, CHEMINFORMRX,
       CHEMLIST, CIN, CSCHEM, CSNB, DDFU, DRUGU, EMBASE, IFICDB, IFIPAT,
       IFIUDB, IMSCOSEARCH, IMSDRUGNEWS, IMSRESEARCH, IPA, MEDLINE, MRCK*,
       MSDS-OHS, NAPRALERT, PHAR, PROMT, PS, RTECS*, SCISEARCH, TOXCENTER,
       USAN, USPATZ, USPATFULL
         (*File contains numerically searchable property data)
     Other Sources: EINECS**, WHO
         (**Enter CHEMLIST File for up-to-date regulatory information)
```

Absolute stereochemistry. Rotation (-).

=>

PROPERTY DATA AVAILABLE IN THE 'PROP' FORMAT

5638 REFERENCES IN FILE CA (1907 TO DATE)
999 REFERENCES TO NON-SPECIFIC DERIVATIVES IN FILE CA
5654 REFERENCES IN FILE CAPLUS (1907 TO DATE)
11 REFERENCES IN FILE CAOLD (PRIOR TO 1967)